CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

JAS-ANZ BSCIC ISO 9001 REGISTERED

Job No.: CTCE/BBMP/WNo.12/BTRK/WBM/AIV/2013-14 22.02.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
Agency	**Mr. B.T. Ravikumar,** Contractor, Bangalore.
Name of the Work	Providing BS Slab drain and metalling in Kerekodi Road, near Nisarga Layout at Abbigere in Ward No. 12 in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	EE/DD/WO/219/2013-14 Dated: 27.01.2014
Source / Location	WBM Mix Plant, Bangalore
Type of Mix	Water Bound Macadam
Date of Testing	22.02.2014

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	382	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	82	85	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	300	
4	Aggregate Impact value = percent fines	21.47	22.08	
	100* (W_2/W_1)%			**21.77**

Comments:

→ Maximum allowable Aggregate Impact value for Water Bound Macadam is 30%

Note:

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Reference	EE/DD/WO/219/2013-14 Dated: 27.01.2014
Source / Location	WBM Mix Plant, Bangalore
Type of Mix	Water Bound Macadam
Date of Testing	22.02.2014

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	379	382	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	79	82	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	300	
4	Aggregate Impact value = percent fines	20.84	21.47	
	100* (W_2/W_1)%			21.16

Comments:

→ Maximum allowable Aggregate Impact value for Water Bound Macadam is 30%

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Reference	EE/DD/WO/219/2013-14 Dated: 27.01.2014
Source / Location	WBM Mix Plant, Bangalore
Type of Mix	Water Bound Macadam
Date of Testing	22.02.2014

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	381	384	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	81	84	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	300	
4	Aggregate Impact value = percent fines	21.26	21.88	
	100* (W_2/W_1)%			21.57

Comments:

→ Maximum allowable Aggregate Impact value for Water Bound Macadam is 30%

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DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
Agency	**Mr. B.T. Ravikumar,** Contractor, Bangalore.
Name of Work	Providing BS Slab drain and metalling in Kerekodi Road, near Nisarga Layout at Abbigere in Ward No. 12 in Shettyhalli Sub Division, BBMP, Bangalore.
Reference	EE/DD/WO/219/2013-14 Dated: 27.01.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	Water Bound Macadam (Grade-II Metal)
Date of Testing	22.02.2014

Result : Flakiness Index = **11.26%**

Elongation Index = **13.57%**

Result : Combined Flakiness & Elongation index 24.83%

Comments:

→ Maximum allowable Flakiness and Elongation Index for Water Bound Macadam is 30%

Note:

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DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

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Reference	EE/DD/WO/219/2013-14 Dated: 27.01.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	Water Bound Macadam (Grade-II Metal)
Date of Testing	22.02.2014

Result : Flakiness Index = **11.64%**

Elongation Index = **13.87%**

Result : Combined Flakiness & Elongation index 25.51%

Comments:

→ Maximum allowable Flakiness and Elongation Index for Water Bound Macadam is 30%

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